

DRS. REID AND FARADAY.  
VENTILATION OF THE HOUSE OF LORDS.

On the 15th, Dr. Reid delivered a lecture at Willis's Rooms, St. James's, in reply to Dr. Faraday's account of the mode of ventilation adopted by Mr. Barry in the new House of Lords, reported at some length in our Journal.\* It was very discursive and very dull, treating for the most part of generalities, as well understood by the majority of persons present as by the lecturer, and did little, we should think, to advance his cause in the estimation of those who heard him.

He said that nothing was attracting so much attention at this moment as matters sanitary: all were becoming alive to their value, and little as the subject of ventilation, one of the most important points in the inquiry, was at present understood, it was impossible to say how far our knowledge of it might be advanced through the number of minds now engaged upon it. The true foundation for all progress was education, and to prove that he had always felt the importance of extending elementary knowledge, he quoted passages from evidence given by him in 1835. He was satisfied that by education, a man's life might be lengthened, and his comfort increased. Elementary knowledge was of the first consequence. Though architecture had been practised thousands of years, it could not be rendered subservient to sanitary arrangements till the constitution of the atmosphere had been investigated and was understood. The grand object was to unfold to peer and peasant elementary knowledge, and his desire was to adapt a certain amount of elementary science to primary schools. The Doctor then traced his own progress, read various quotations to show his views on ventilation, and what he had done at the House of Commons. For two years he was scarcely out of the place night or day. While communications were passing between himself and the government, Faraday was consulted,—a very proper step, to which he could take no objection, and had never commented upon. But since then, Faraday had thought fit to make the matter a subject for a lecture in a public arena. He considered, therefore, he had now a right to answer it. He had always entertained great respect for Dr. Faraday, and he had no doubt, if the Council of the Royal Institution had thought of it, they would have sent him a ticket for the lecture, as he had done to them on the present occasion. As it was, however, he knew nothing of it until it was over, and must therefore take the published reports of it as a foundation for his remarks. It was necessary to say that the plan he had prepared for ventilation of the House of Peers was thrown out, and another adopted. The point was, if it were a better one. Before speaking of it, he must advert to the general question of ventilation. The grand object was to give fresh air without draughts. [Every one knows this, and nearly, indeed, every thing else that the Doctor said on the subject. The great thing is, "how to do it."] Air may be made to move in any direction, but there are many things in the architectural arrangement of a building to prevent the exact result desired. Various mechanical means may be used to produce motion, but spontaneous movements should be made available when practicable. He then made various experiments, familiar to all, to show the nature and properties of air, and at last described in brief the mode of ventilating the House of Peers, with which our readers are familiar. He might now be asked to say what he thought of it. His reply would be, that he had worked upon that plan (namely, ventilation by descending currents), and claimed it entirely as his own, although he was bound to say that the architect, having greater control over the arrangement of the building, had been able to give it greater advantages than he could have obtained for it. He agreed that the plan was a good one, but not the best. If Mr. Faraday, before giving his lecture, had called upon him, he might have seen a model with that plan in operation, which was made in 1845 and 1846. The arrangements he made in the temporary House of Lords, on the occasion of Lord Cardigan's trial, so long ago as 1841, would show that this plan was not unknown to him even then, and he exhibited a series of drawings, wherein, he said, the ascent

and descent of the air were shown. He would not assert that these drawings had been seen by Mr. Barry, but the model referred to had been examined by ten or twelve thousand persons, and could hardly be unknown to the architect. The Doctor then exhibited various experiments with this model, shewing the power of driving in air, either from the top or the bottom, a power which we apprehend was perfectly well understood long prior to the advent of either the learned Doctor or the excellent architect. The theory of ventilation has long been tolerably well comprehended; it is just the application of it that is the difficulty.

The lecturer, towards the conclusion of his discourse, commented on the misrepresentations, as he termed them, of various journals, and hinted, if we understood rightly, at legal proceedings against the referees who were appointed to decide between him and Mr. Barry, namely, Mr. G. Stephenson, Mr. Hardwick, and Professor Graham.

DECORATIONS AT IRONMONGERS' HALL.

THE large room in Ironmongers' Hall, Fenchurch-street, which is 70 feet long, 30 feet wide, and 30 feet high, has been decorated recently by Messrs. Jackson, of Rathbone-place, in the Elizabethan manner, by means of *papier mâché*, colour, and gilding. The ceiling is coved and divided into panels by massive ornamented beams, something like the well-known ceiling at Audley End. The entrance-door has Ionic columns, the fire-place caryatides, and the opposite end of the room an ornate gallery, all made to look like oak. The total amount of the contract was 1,563*l.* The character is well preserved throughout.

We should be glad to see the London companies spend part of their surplus funds in the encouragement of art, by commissioning some of our artists to adorn their walls. Cannot the Ironmongers (being men of metal) be induced to set an example? They would find it a good investment,—perhaps a main-stay and support for the company in future times.

THE GAS MOVEMENT NOW A NATIONAL QUESTION.

IT is by no means necessary for us to claim credit to ourselves for what a numerous and influential portion of the newspaper press has already, both directly and indirectly, accorded to us, namely, a faithful and impartial leadership of public opinion towards that complete exposure of the anomalous state of the statistics and the economics of the gas question, for which we were in turn indebted chiefly to materials gleaned from the provincial press, from reports of the Government surveyors, and from other sources, whence a careful digestion and comparison, by correlation and contrast, clearly established the generally excessive profits and mismanagement of some of the old companies. To the Guardian Gas Company of Liverpool in especial were we indebted for some of our sharpest weapons; and the progress of the movement at Liverpool accordingly merited, and has received, a considerable share of our attention. "Glancing over a highly scientific work published in London," says the *Liverpool Weekly News*, "and which is quoted as an authority by all classes, we observe the editor has made the labours of the Guardian Gas Company the foundation of a rigid inquiry into the whole principle on which the manufacture and supply of gas has been and ought to be governed, and that his appeal has been responded to, as stated by himself, by at least half a hundred of the provincial press of the kingdom. The subject has been taken up on principle, and it is fitting that so talented a publication as *THE BUILDER* is allowed to be, should take the lead among the London press. We congratulate ourselves on having been instrumental, at an early stage of this important inquiry, in fixing public attention on it. As the editor of that publication remarks:—'It is quite clear that dust has been already thrown into the eyes of the public for too long for patient endurance.' Nor has the notice of this important subject been confined to newspapers and provincial communities: the matter has now become of national interest, and, therefore, is to receive national attention."

• • • Parliament will take up the subject,

and monopolists in gas, as in corn, must yield to the pressure of a stern necessity. *London trembles, for there the strong-hold of gas monopoly is. It is there where the union is concentrated and represented.*"

Yes, the metropolitan strong-hold of gas monopoly does indeed tremble; and a somewhat striking proof that it does so, has been manifested even since our Liverpool contemporary penned the able article whence the preceding paragraph is extracted. The alarm has been rung, and forthwith issues out a new defender of abuses, a *Gas Gazette*, an open and undisguised monopolist, who, militant in favour of the public plunder, ventures only to appeal to "an enlightened public" itself in the smallest possible compass, in the modest little closing paragraph—the "Q" in the corner—of an elaborate, and by no means brief prospectus, because it would be "wanting in respect to that public" to "conclude this prospectus without" the slightest recognition of their existence; although, of course, the monopolist who proposes, in the outset of his campaign, to introduce his subject to the proper quarter by "sending the first eight numbers of the *Gas Gazette* to every gas company he is acquainted with, unless he be expressly requested not to do so," has not the confidence to look to that public for support even while he *pro forma* "ventures" to "respectfully solicit subscribers."

Perhaps the pith of any thing like fair and impartial argument or axiom in favour of monopoly in this notable prospectus, and the only portion of it to which we need particularly refer at present, is contained in the declaration that "had such a publication as the *Gas Gazette* be proposed to be, in existence during the last twenty years, the idea that gas can in any one town or locality be permanently supplied at a cheaper rate by two companies than by one, would long ago have been regarded as an absurdity too gross to be entertained by any person possessing common sense."

Now that one company *could* or *can* permanently supply gas to any one town or locality at a cheaper rate than two, it requires very little common sense to perceive; but surely the monopolists must think their opponents possessed of very little of that useful commodity, indeed, if they imagine them to be incapable of distinguishing between what *can* be done and what *has been* done, *is being* done, or still *will be* done by old companies, whenever they are allowed to monopolize the sale of gas; and we are much mistaken if the anti-monopolists do not give their opponents full credit for the possession of much more common sense than that which shines forth out of such a gross attempt at humbug.

Since one company *can* do so much more than two, towards the cheapening of gas, the more incumbent is it on that one to do what it *can* do in this respect, and the more disgraceful is the fact that it had almost uniformly persisted in plundering the public to an enormous extent until compelled by sheer competition, as such companies have of late so often been, to reduce their charges to a more just and reasonable standard. The proofs of the truth of what is now maintained are numerous; but we shall only evidence two notorious instances, which, though already exposed by us and others to public reprobation, still stand altogether uncontradicted and unpalpated. Witness, we repeat, the fruits of monopoly and of competition at North Shields, where the Improvement Commissioners desired to moderate the enormity of the monopolist company's charges by a reduction from 5*l.* 2*s.* to 4*l.* 3*s.* per street lamp. The one company, who could afford to charge so much lower than two could, impudently and falsely maintained that '4*l.* 3*s.* could not possibly pay.' And yet, by virtue of competition alone, the charges for supplying these very lamps with gas of the best quality, were reduced not merely to 4*l.* 3*s.*, not merely to 3*l.* 3*s.*, nay, not merely to 2*l.* 5*s.*, but down all the way to 1*l.* 7*s.*! while even on that price the shareholders divided 3 per cent. in the very first year, 5 per cent. in the second, and a continuance of prosperity thereafter. Again, the Liverpool Guardian Gas Company compelled the old establishments at Liverpool to reduce their charges from 7*l.* 6*d.* down to 4*l.* 6*d.*, and yet these very companies are solvent as ever; although deprived of 35,000*l.* a year in consequence of the reductions which competition, and competition alone, compelled them to make. Undoubtedly, as

\* See p. 126, ante.